AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1.   (Currently Amended) A system comprising:

an accumulation buffer;

an [[a]] image buffer; and

a mixing unit configured to read a first stream of image pixels from the image buffer, read a second stream of pixels from the accumulation buffer, blend each image pixel with the corresponding accumulation buffer pixel based on an alpha value provided with the image pixel, and thus, generate a third stream of output pixels, wherein the third stream of output pixels are transferred to the accumulation buffer.

2.   (Original) The system of claim 1, wherein the color precision of the accumulation buffer is greater than the color precision of the image buffer.

3.   (Original) The system of claim 1, wherein the mixing unit includes a plurality of mixing circuits, wherein each mixing circuit operates on a corresponding color component.

4.   (Currently Amended) The system [[sytem]] of claim 1, wherein the accumulation buffer resides within a texture buffer of a graphics system.

5.   (Original) The system of claim 1, wherein the image buffer resides within the frame buffer of a graphics system.

6.   (Original) The system of claim 1, wherein the color precision of the accumulation buffer is at least ΔN larger than the color precision of the image buffer, wherein ΔN is the

2

base two logarithm of the maximum number of images to be blended into the accumulation buffer.

7. (Original) A method comprising:

(a) reading a first stream of image pixels from an image buffer;

(b) reading a second stream of pixels from an accumulation buffer;

(c) blending each image pixel with the corresponding accumulation buffer pixel based on an alpha value provided with the image pixel, and thus, generating a third stream of output pixels; and

(d) transferring the third stream of output pixels to the accumulation buffer.

8. (Original) The method of claim 7, wherein the accumulation buffer color depth precision is larger than the image buffer color depth precision.

9. (Original) The method of claim 7, wherein said blending comprises blending red, green and blue components of each output pixel in parallel.

10. (Original) The method of claim 7, wherein (a), (b), (c) and (d) are performed by a graphics hardware accelerator chip in response to software functions executed on a host processor.

11. (Original) A graphics system comprising:

a frame buffer;

a texture buffer;

a hardware accelerator configured to read image pixels from the frame buffer, to read pixels of an accumulation buffer in the texture buffer, to blend each of the image pixels with the corresponding accumulation buffer pixel with the blend fraction being the α value of the image pixel;

3

wherein the output pixels resulting from said blending are transferred to the accumulation buffer in the texture buffer.

12.   (Original) The graphics system of claim 11, wherein the texture buffer has a configurable pixel depth precision.

13.   (New) The graphics system of claim 11, wherein the texture buffer comprises one or more synchronous dynamic RAMs (SDRAMs).

14.   (New) The graphics system of claim 11, wherein the frame buffer comprises one or more 3D-RAM memory devices.

15.   (New) The system of claim 1, wherein the first stream of image pixels corresponds to a single image.

16.   (New) The method of claim 7 further comprising:

blending a plurality of images by repeatedly performing (a), (b), (c) and (d).